

Attorney Docket Number 2000.605 US

In the Claims

Claims 1 - 8 Cancelled

9. (Currently Amended) A An isolated Lawsonia intracellularis outer membrane protein, said protein comprising an amino acid sequence that is at least 70 % homologous to an amino acid sequence selected from the group consisting of SEQ ID NO: 2, being immunoreactive with antisera to SEQ ID NO: 2 SEQ ID NO: 4, a Lawsonia intracellularis Outer Membrane Protein and having a molecular weight of 19/21 about 37 kD, said Outer Membrane Protein being obtainable by a process comprising the steps of
a) subjecting an outer membrane preparation to SDS-PAGE and
b) excision of the 19 or 21 37 kD band from the gel, and an immunogenic fragment of said protein.

Claims 10 - 12 Cancelled

13. (Currently amended) The Lawsonia intracellularis Outer Membrane Protein according to claim 9, having a molecular weight of 19/21 kD, said Outer Membrane Protein being obtainable by a process comprising the steps of
a) subjecting an outer membrane preparation to SDS-PAGE

Attorney Docket Number 2000.605 US

b) ~~excision of the 19 or 21 kD band from the gel or an immunogenic fragment of said protein comprising SEQ ID NO: 2.~~

Claims 14 - 17 Cancelled

18. (Currently amended) ~~Vaccine for combating *Lawsonia intracellularis* infections, characterized in that it comprises an~~ An immunogenic composition comprising an immunogenically effective amount of a protein according to claim 9, and a pharmaceutically acceptable carrier.

19. (Currently amended) ~~Vaccine~~ An immunogenic composition according to claim 18, characterized in that it comprises an adjuvant.

20. (Currently amended) The immunogenic composition according to claim 18 ~~or 19~~, characterized in that it comprises an additional antigen derived from a virus or micro-organism pathogenic to pigs or genetic information encoding said antigen.

21. (Currently amended) ~~Vaccine~~ The immunogenic composition according to claim 20, characterized in that said virus or micro-organism pathogenic to pigs is selected from the group of *Pseudorabies virus*, *Porcine influenza*

Attorney Docket Number 2000.605 US

virus, Porcine parvo virus, Transmissible gastro-enteritis virus, Rotavirus, *Escherichia coli*, *Erysipelo rhusiopathiae*, *Bordetella bronchiseptica*, *Salmonella cholerasuis*, *Haemophilus parasuis*, *Pasteurella multocida*, *Streptococcus suis*, *Mycoplasma hyopneumoniae* and *Actinobacillus pleuropneumoniae*.

Claims 22 - 37 Cancelled

38. (Currently amended) A vaccine An immunogenic composition for combating *Lawsonia intracellularis* infection comprising a protein according to claims 9 - 15 claim 9.